IDAHO
DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

HAYSPUR HATCHERY

Annual Report

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by
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Hayspur Hatchery

ABSTRACT

The Hayspur Hatchery, oldest in the state, was started in 1906. It is located in the Wood River Valley between Silver Creek and the Big Wood River. The nearest towns are Picabo, located about five miles southeast of the hatchery on Highway 20; Gannett is about two and one-half miles north on old Highway 23; Bellevue is 16 miles north on Highway 75; Ketchum and Sun Valley are about 30-31 miles north on or near Highway 75; and Twin Falls is about 60 miles south on Highways 93 and 75.

Our main objective has always been to raise a good quality trout in sufficient numbers to supply the streams, lakes and reservoirs in the area of Region 4 and the Stanley Basin. The past few years we have been transferring part of our production to Mullan for redistribution in North Idaho. We have also planted fingerlings in many areas of the state.

Hayspur has developed a good strain of rainbow broodstock from which we spawn from 3.5 million to 5.25 million eggs annually. The average egg size has remained about 238 eggs per ounce. The hatchery supplied several other hatcheries in the state with eggs, fry and fingerlings in addition to our own needs. Hayspur's requirements are 1.5 million fry and fingerlings. The water supply is comprised of springs, artesian wells and Loving Creek water. We are capable of raising up to 145,000 pounds of trout a year when things are ideal, but strive for a more realistic figure between 100,000 and 125,000 pounds.

We have had no serious disease problems except those caused by nitrogen. We have installed Koch Ring packed columns in the hatchery and small raceways, which seems to have eliminated most of the nitrogen. The hatchery pathologist checked the ovarian fluid in our broodstock this fall and told us the broodstock may be carrying IPN and IHN. "Free" eggs from the following sources were installed into the water that drains directly into our broodstock pond: Steelhead from Dworshak in 1978 and 1979; coho eggs from Willard National Fish Hatchery and Cascade Locks in the '70's; and kokanee from several sources. The only eggs purchased and which were certified as disease free were the brown trout eggs from Plymouth Rock, Massachusetts. These shipments of free eggs were protested because of the possibilities of introducing disease into our broodstock.

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Fish Hatchery Superintendent II

OBJECTIVES

The objectives of the Hayspur Hatchery are:

1. To raise about 120,000 pounds of trout each year to distribute in all our streams, lakes and reservoirs as part of the statewide hatchery system.

2. To plant most of our catchables in the Big Wood River and its tributaries, which are Deer Creek, Trail Creek, Warm Springs Creek, North Fork Creek and Baker Creek. We also stock Fish Creek Reservoir, Little Wood, Magic, Mormon and Thorn Creek reservoirs with large amounts of fingerling rainbow and some catchables when necessary or when we have extra. Some of the lakes in the Stanley Basin are also stocked. The upper streams of that area are no longer stocked because of salmon spawning.

3. Most years, Magic Reservoir is stocked with 500,000 fry and fingerling rainbow, 200,000 stocked in Fish Creek, 200,000 into Little Wood, 100,000 into Mormon, 20,000 into Thorn Creek, 10,000 catchables into Dog Creek Reservoir and 1,000 into Lava Lake near Craters of the Moon Monument. Lake Hill Lakes are stocked with 500 fingerling and Penny, Dollar and Lake Creek lakes are stocked with whatever the fishing pressure demands. One hundred ninety-five thousand seven hundred seven (195,707) Mt. Whitney strain rainbow trout (R2) were reared, vaccinated and transferred to American Falls. This represented a 36.5% loss from the original Mt. Whitney strain eggs received.

INTRODUCTION

Hayspur Hatchery is located in Region 4 in the Wood River Valley between Silver Creek aid Big Wood River. The water comes from springs, artesian wells and Loving Creek, which is a short creek between Gannett and Silver Creek. We require about 21 cfs to operate properly, but get by on a lot less when we need it the most.

The hatchery has six 12' x 400' x 3' large raceways, one lagoon 500' x 100' which averages about 6' deep. We raise our broodstock in about a one-acre lagoon. They run into raceway #7 near the hatchery at spawning time. To do this, we divert most of our spring water through the raceway which has a small fish ladder and chute in it. The hatchery building has 20 vats measuring 3' x 12' x 2'. Twenty single-stack Heath incubators and 6 hatching upwells are used to eye or hatch our eggs. With the fluctuating water supply, due to drought or irrigation demands, up to 145,000 pounds of trout can be raised when all things are ideal.

FISH PRODUCTION

During the 1982-83 fish year, we raised about 94,320 pounds of trout from 1,708,045 fry and fingerling, and 279,177 catchables. We are presently (December 15, 1983) holding 371,120 3" to 6" fingerlings for 1984 planting plus several million eggs and fry from this year's spawning. This was after transferring 5,700 pounds of Rl numbering 131,000 and 30,082 pounds of R2

numbering 195,707 to American Falls.

A total of 4,884,584 eggs came from our broodstock during the fall of 1982. Ashton received 549,120, Grace received 864,416 and Hagerman received 464,100. The rest we hatched and raised ourselves. We had a 93.9% eye-up on our eggs. We received 308,100 Mt. Whitney R2 eggs in April and raised them until November 4.

FISH HEALTH

We have installed packed columns in the hatchery and small raceways. In doing so, we eliminated keratolysis during 1983. Our only loss, which was minimal, came from Bacterial Gill disease.

FISH RELEASES

During the 1982-83 season, we planted and transferred 1,374,615 0-3" R1 totaling 17,145 pounds, 333,430 3-6" totaling 7,800 pounds and 279,177 R1 catchables totaling 68,375 pounds. Three hundred fifty (350) excess brood-stock were planted in Fish Creek Reservoir. These weighed 1,426 pounds. These were planted January 4, 1985, with the help of our local county snow-plowing crew. Ice fishing has been excellent the past few years on Little Wood and Fish Creek reservoirs. Ice fishing on Magic Reservoir has been pretty scattered.

HATCHERY IMPROVEMENTS

As I stated previously, we have installed the nitrogen eliminating columns, which, so far, have helped us tremendously. We have another bulk feed bin waiting to be raised on its stands as soon as weather permits. We had a dealer of Troxymite cement patcher experiment on about 10' of raceway walls. If it holds over winter, we will try more. We purchased an air compressor and a gas-driven weed eater.

FISH FEED UTILIZED

During the 1982-83 fish year, 218,820 pounds of feed was used at a cost of $39,308.89. This brought our cost per pound of fish produced close to $.41 with a feed conversion of 2.0. Our bulk feed was of very poor quality this past summer and got up to three pounds of feed to produce a pound of fish.

MISCELLANEOUS ACTIVITIES

We had close to our 5,000 average visitors at the hatchery again this

past year.

Our crew helped out on sage grouse and deer check stations as usual.

HATCHERY NEEDS

We hope to get most of our raceway walls repaired during 1984 and 1985 and our diversion dam repaired along with our spring house. Our domestic water line should be replaced in the next year or so. Our brood pond and sewage lagoon should be cleaned out also.

ACKNOWLEDGEMENTS

Hatchery staffing during 1982-83:

Leland "Bud" Batchelder, Fish Hatchery Superintendent II
Jack Siple, Fish Hatchery Superintendent I
Roland Warren, Fish Culturist
Michael C. Born, Bio-Aide
William L. L. Dugger, Laborer
Peter Johnson, Laborer
William L. L. Dugger, CETA
Peter Johnson, CETA

Table 1. Fish transfers during 1983.

Date	Species	Receiving waters	Number	Pounds	Size
	R-1	Mullan Hatchery	23,200	5,800	6”-9”
8-25	R-1	Mullan Hatchery	8,640	2,700	7”-10”
9-01	R-1	Nampa Hatchery	80,280	1,800	3”=4”
9-02	R-1	Nampa Hatchery	71,820	1,800	3”-4”
9-08	R-1	Hagerman Hatchery	68,940	1,800	3”-4”
9-09	R-1	Hagerman Hatchery	19,150	500	3”-4”
9-09	R-1	Hagerman Hatchery	93,240	3,700	3”-5”
	Totals		365,270	18,000	

Table 2. Nine-year spawning records of Hayspur, R-1 stock.

Year	Eggs taken	Average size	Loss	% eye-up	Other hatcheries shipped
1975	3,168,244	216	343,434	89	1,344,608
1976	2,956,345	238	455,271	86	1,304,776
1977	4,399,560	264	355.800	91.5	2,416,656
1978	5,210,890	251	454,746	91.3	2,592,616
1979	5,224,100	238	487,66	90.7	2,916,928
1980	3,760,252	238	304,116	91.9	1,413,480
1981	3.380,642	38	241,122	92.9	99,280
1982	4,880,500	238	340,143	93.0	1,696,600
19083*	3,008,048	238	309,064**	91.0	788,440

*We quit taking eggs three weeks early due to IPN positive check on brood.
**Estimate.

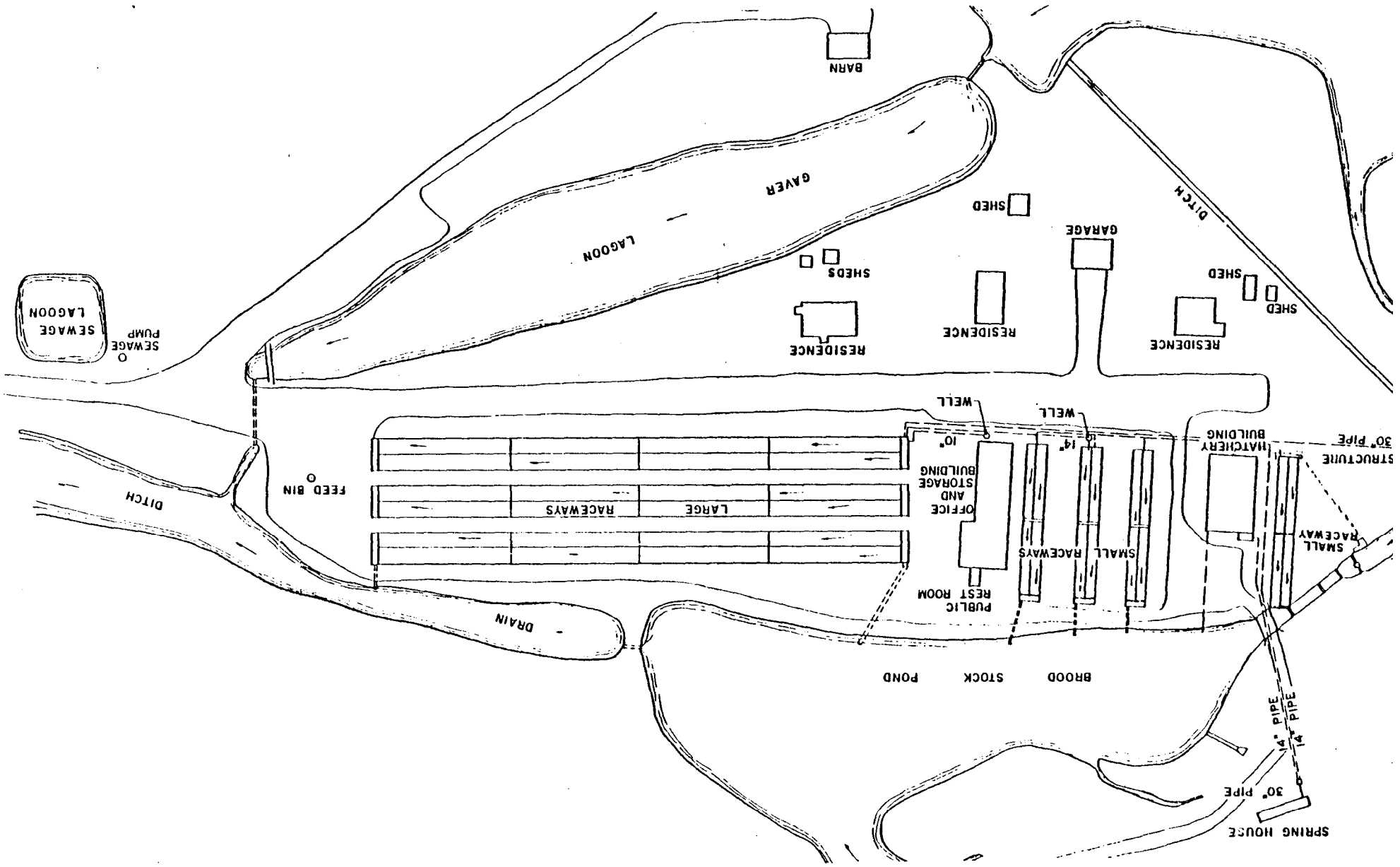

Figure 1. Map of hatchery grounds.